

Appl. No. 09/920,978

Amendments to the Claims

Claims 1-7 (cancelled).

8. (Previously presented) The method of claim 16 wherein the etching comprises plasma etching.

9. (Previously presented) The method of claim 16 wherein the etching comprises magnetically enhanced plasma etching.

10. (Previously presented) The method of claim 16 wherein the etching comprises substantially anisotropic etching of the silicon nitride comprising layer.

Claims 11-13 (Cancelled).

14. (Previously presented) The method of claim 16 wherein the etching chemistry comprises at least two fluorocarbons.

15. (Previously presented) The method of claim 16 wherein the etching chemistry comprises at least three fluorocarbons.

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16. (Currently amended) A method of forming integrated circuitry comprising:
forming a layer of oxide material over a semiconductor substrate;

forming a layer comprising silicon nitride over the layer of oxide material a
~~semiconductor substrate;~~

forming a patterned photoresist comprising masking layer over the silicon nitride
layer, the patterned masking layer comprising mask openings therethrough; and

etching an opening through the silicon nitride comprising layer, through the layer of
oxide material and into a semiconductive material of the semiconductor substrate, the
etching occurring through the mask openings substantially selectively to the photoresist
comprising layer using a single an etching chemistry having reactive components
consisting of ammonia and at least one fluorocarbon selected from the group consisting of
CF₄, C₄F₆, C₄F₈, C₂F₆, C₃F₈, C₅F₈, and chlorofluorocarbons, under etching conditions
effective to substantially anisotropically etch the silicon nitride comprising layer, the etching
chemistry comprising a volumetric ratio of all fluorocarbon to the ammonia of from 40:1 to
20:1 and providing increased selectivity to the photoresist comprising masking layer than
would otherwise occur using identical etching chemistry and identical etching conditions
without any ammonia.

Claims 17-20 (Cancelled).

21. (Original) The method of claim 16 wherein the silicon nitride comprising layer
consists essentially of silicon nitride.

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Claims 22-46 (Cancelled).

47. (Previously presented) The method of claim 16 wherein the photoresist comprises 193 nanometer photoresist.

48. (Previously presented) The method of claim 16 comprising introducing the ammonia and fluorocarbon successively into a reaction chamber in which the substrate is received during the etching.

49. (Previously presented) The method of claim 16 wherein the integrated circuitry forming comprises forming shallow trench isolation within the semiconductor substrate, the photoresist comprising masking layer being patterned effective to form a plurality of shallow trench mask openings therethrough.

Claims 50-66. (Cancelled)